

REMARKS

Applicants greatly appreciate the consideration and withdrawal of the rejection under 35 U.S.C. 112, first paragraph against claims 1 and 9 for the addition of the term "stand alone" in paper 9 mailed July 17, 2003.

The Examiner has rejected claims 1-2, 6-9, and 11-13 under 35 U.S.C. §102(b) as anticipated by Hu US Patent 5,680,841.

Applicants have amended claims 1 and 9 in a further attempt to distinctly claim, that which is regarded as the invention. Applicants still contend that the Hu reference does not teach every limitation as set forth in new claims 1 and 9. Specifically, the Hu reference does not teach or suggest that the "head is completely sealed", the fluid system is "a stand alone fluid system" used SOLELY for actuating the at least one subsystem positioned in the head assembly and is "isolated from any other fluid system". The support for the Examiner's rejection in the prior art of Hu is in lines 12-13 of column 4 as previously set forth that reads, "The hydraulic fluid may be engine lubricating oil, engine fuel, or any other suitable fluid". The sentence teaches that the fluid may be interchangeable but does not teach that head is sealed and that the stand alone fluid system is isolated from any other fluid system. The sentence in the Hu reference teaches nothing more than the fluid itself is interchangeable but not completely isolated from any other fluid/system. Applicants continue to contend the Hu reference in many regards teaches away from the claimed invention. This sentence teaches away in the fact that if the fluid were engine lubricating oil, engine fuel or some other hydraulic fluid the system would not be used "SOLELY" for actuating at least one subsystem positioned in the head assembly and "isolated from any other fluid system". Furthermore, the Hu reference teaches a fluid system to improve cam and valve interaction. This does not address the problem of keeping the operating fluid free from contaminants such as from combustion, controlling the temperature for purposes of response time of the systems, or using a fluid that may not be suitable for any other hydraulic system on a machine or in an internal combustion engine. Without the teaching of the problem and the missing limitations as set forth above the Hu reference cannot anticipate the claims 1 and 9 either expressly or inherently. Further, as stated above the third sentence in paragraph 19 states

“Since the fluid system 20 is isolated from other engine fluid systems, such as an engine lubrication system or a fuel supply system...”. Applicants again agree that the Hu reference does state “the hydraulic fluid may be ... any other suitable fluid” but is completely void of any teaching or suggestion that it is unnecessary to share such a fluid with a conventional, existing fluid subsystem. As set forth above the mere fact that Hu states the fluid could be engine lubricating oil, or engine fuel teaches the exact opposite of the Examiners view point in this regard. Applicants contend that the reference does suggest that other fluids could be used to perform the hydraulic functions, however the Hu reference, and for that matter any of the art of record, is void of a teaching or suggestion that the fluid system be a self contained stand alone system. Applicants therefore contend that independent claims 1 and 9 are not anticipated by the Hu reference and respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. §102(b).

Regarding claims 2, 6-8 and 11-13, these claims add further limitations to independent claims 1 and 9 and therefore are believed to be allowable for at least the same reasons. Applicants therefore respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. §102(b) of claims 2, 6-8 and 11-13.

The Examiner has rejected claims 1-2, 8, 9 and 13 under 35 U.S.C. §103(a) as being unpatentable by Hara US Patent 5,501,186.

Applicants respectfully traverse the Examiners rejection under 35 USC §103(a). The Hara reference cannot provide a prima facie case for a 103(a) rejection because MPEP § 2143 Mandates:

“...three basic criteria must be met. First, there must be some suggestion or motivation, either in the referenced themselves or in knowledge generally available to one of ordinary skill in the art, to modify the references or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claimed limitations.”

First, there is no suggestion or motivation in the Hara references cited by the Examiner. MPEP 2143.01 sets forth three possible sources of motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the

knowledge of persons of ordinary skill in the art. The Hara reference teaches a mechanism to reduce stress on the valves during low and high engine speeds. Therefore there is no teaching whatsoever of keeping fuel injectors and valve actuation mechanisms free from contaminants or controlling temperature for reaction time. Furthermore, the Examiner relies on figure 8 and specific passages from the Hara reference and in the Examiners point of view is “considered a stand alone system with a stand alone reservoir, and be used solely for actuating the at least said one subsystem”. The only way such a determination can be made is in light of the limitations of the claims at hand and the teachings of the instant application. This is true because the Hara reference is completely silent as to what reservoir is shown (engine lubrication sump, other reservoir, etc.) in the drawings and the detailed specification. Hara is also silent to the fact that the reservoir and hydraulic system is completely isolated from any other fluid system and used solely for the purpose of actuating a subsystem positioned in the head. The Examiner is clearly applying improper hindsight reconstruction for his consideration in light of the application at hand. The mere fact that the fluid system could be used as claimed in the instant application is by itself not sufficient evidence for a prima facie obviousness rejection. MPEP states that “the mere fact that references could be modified or used for the invention at hand does not render the resultant combination obvious unless the **prior art also suggests the desirability of such invention.**” Second, due to the fact that the problem of fluid cleanliness for increasing component life or controlling fluid temperature to control viscosity, or altering the fluid to provide a fluid with appropriate viscosity so as to improve response time is not taught or even remotely suggested by the Hara reference. The Hara reference therefore has no reasonable expectation for success. Lastly, the references do not teach all of the claimed limitations. Specifically, Hara does not teach the limitations of the newly amended claims. Specifically, Hara does not teach “A stand alone fluid system for an internal combustion engine, said internal combustion engine including a head assembly being completely sealed and having at least one subsystem positioned therein, said fluid system comprising: a stand alone fluid reservoir; hydraulic fluid contained within said stand alone fluid reservoir and isolated from any other fluid systems; and a fluid pump operatively supplying said hydraulic fluid to the head assembly and being used solely for actuating the at least one subsystem positioned in the head assembly of the

internal combustion engine. For the reasons set forth above the Examiner is respectfully requested to reconsider claims 1-2, 8, 9 and 13 and to withdraw the rejections under 35 U.S.C. §103(a) of said claims.

The Examiner has rejected claims 5 and 10 under 35 U.S.C. §103(a) as being anticipated by Hu US Patent 5,680,841 or Hara US Patent 5,501,186 (as applied to claims 1 and 9 above) in view of Glassey US Patent 5,191,867. The Examiner further explains that the Hu reference teaches all of the limitations of the present invention, except for the subsystem being a fuel injection system, which is taught by Glassey.

Applicants respectfully traverse the Examiners rejections for the same reasons as argued above. Neither Hu nor Hara teach a fluid system that is a stand alone system used solely for actuating a subsystem positioned in the head assembly and is isolated from any other fluid system. Therefore, the combination of Hu or Hara and Glassey does not teach or even suggest the combination of elements as set forth in the present application. MPEP 2143 further states "A statement that modifications of the prior art to meet the claimed invention would have been " 'well within the ordinary skill of the art at the time the claimed invention was made' " because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references." Applicants therefore respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. §103(a) of claims 5 and 10.

The Examiner has rejected claims 3-4 and 14 under 35 U.S.C. §103(a) as being anticipated by Hu US Patent 5,680,841 or Hara US Patent 5,501,186 (as applied to claims 1-2, 9 and 13 above) in view of Bartley US Patent 6,220,521. The Examiner further explains that the Hu reference teaches all of the limitations of the present invention, except for the fluid system including a heat exchanger to control fluid temperature, which is taught in Bartley.

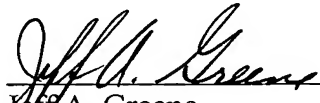
Applicants respectfully traverse the Examiners rejections for the same reasons as argued above. Hu does not teach that the fluid system is used solely for actuating a subsystem positioned in the head assembly. Therefore, the combination of Hu and Bartley does not teach or even suggest the combination of elements as set forth in the present

application and respectfully requests withdrawal of the rejections under 35 U.S.C. §103(a) and reconsideration of claims 3-4 and 14 of the present application.

Applicants have amended claims 1 and 9 to further define that which is regarded as the invention and to comply with the response to the Examiners response to arguments as set forth in paper 11 mailed on October 27, 2003. Further more the amendments and arguments made herein place the application in better order in the event of appealing the Examiners erroneous rejections.

It is respectfully urged that the subject application is in condition for allowance and allowance of the application at issue is respectfully requested.

Respectfully submitted,



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